

c) REMARKS – AMENDMENT A

Claims 1, 11 and 19 have been amended so as to delete therefrom the word “about” to which the Examiner objected.

Claims 1, 11 and 19 have also been amended so as to delete therefrom all references to acetylene impurities. Thus, Applicant's amended Claims 1, 11 and 19 are directed to the removal from the fluid mixture of only propadiene and other hydrocarbons containing from 3 to 6 carbon atoms and having more than one double bond.

By contrast, both the '905 and the '517 Kaminsky et al. patents disclose only the removal of acetylenes which initially contain both acetylenes and dienes. For example, both the '905 and '517 patents of Kaminsky et al., disclose that both acetylenes and dienes, in particular, propadiene, are impurities in ethylene and propylene produced by the thermal cracking of hydrocarbons.

For example, the '905 patent discloses that both olefins having a single double bond and olefins having more than one double bond (di-or tri-olefins), including butadiene and propadiene, are impurities in cracked gas produced by thermal cracking of hydrocarbons in the following passages: column 1, lines 35-39; column 3, lines 32-35; column 5, lines 41-44; and column 10, lines 18-24. Essentially the same disclosures are found in the '517 patent in the following passages: column 3, lines 45-47; column 5, lines 62-67; column 7, lines 3-7; and column 10, lines 60-67.

However, in spite of the presence of both diolefins and acetylenes in such cracked gas, the '905 patent discloses that the purification method disclosed therein is a highly “selective and reversible” adsorption of only the acetylenic compounds. Thus, the '905 patent specifically discloses that the dienes are not removed. Disclosures of the selective removal of acetylenic contaminants are found in the '905 patent in the following passages: column 5, lines 50-54; column 6, lines 16-20; column 7, lines 58-60; and column 10, lines 64-66. Essentially, the same disclosures are found in the '517 patent, in the following passages: column 5, lines 6-10 and 41-45; column 6, lines 8-10; and column 8, lines 4-5. Similarly, none of the examples in either of the '905 patent or the '517 patent contain any mention of illustration of the removal of dienes. Lastly, every claim in each of these patents contains the following

limitations: "selective and reversible adsorption and/or complexing of the contained acetylenic contaminants." ✓

Thus, there is no disclosure or even suggestion whatsoever in either the '905 patent or '517 patent that diene contaminants are removed. In fact, in view of the disclosures in both patents (1) that both dienes and acetylenic contaminants are present and (2) that the disclosed processes are selective for the removal of acetylenic impurities, it is clear that both patents disclose that dienes are not removed by the processes disclosed therein.


In addition, both the '905 and '517 patents are and have always been owned by Amoco Corporation which is now named BP Corporation North America Inc. The present application has also always been owned by BP Corporation North America Inc., and the inventors of the invention claimed in the present application were under a duty to assigning such invention and the present application to the same BP Corporation North America Inc. at the time they made their invention. Consequently, all of the requirements of 35 U.S.C. 103 (c) are met in present case.

In view of the above amendment and discussions, Applicants respectfully submit that their Claims 1-20 are allowable, and reconsideration and allowance thereof are respectfully requested.

Please note that the mailing address and telephone number of the undersigned have changed and are presented hereinbelow.

Respectfully submitted,

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